

## Emissions Inventory Help Sheet for Fuel Storage and Handling

Not applicable to bulk plants or terminals

### What Do I Need to Report?

This help sheet is for reporting emissions from fuel storage tanks with capacity of 250 to 15,000 gallons, not at a bulk plant or terminal. Use the **Evaporative Process Form**. Reportable fuels are gasoline, aviation gas and naphtha/JP-4. Do **NOT** report diesel fuel or jet A (jet kerosene). Volatile Organic Compounds (VOCs) are the air pollutants to be reported from fuel storage and handling.

### How Do I Fill Out the Evaporative Process Form?

- Line 1 – “Process Type/Description” should include information relevant to storage, handling and emission controls, such as: “Aviation fuel storage & handling using Stage I vapor recovery; 50% transferred to aircraft by tank truck.”
- Line 2 – Use one of the following Tier Codes:
 

090212	Non-resale petroleum product storage
090213	Resale petroleum product storage
- Line 6 – Mark only one type of storage tank (such as Underground). Use additional forms for other tank types.
- Column 7 – If Process IDs are not printed, provide a different Process ID number for each line used. Name the fuel in column 9 (Material Type). Use a separate line for each applicable emission factor.
- Column 10 – Enter annual usage of the fuel in gallons.
- Column 11 – The pollutant is VOC.
- Column 12 – Select the emission factor (EF) from information given below. In most cases each fuel uses one EF to report all emissions from loading, spillage, displacement, breathing, and vehicle refueling.

### What is Stage I and Stage II?

A Stage I vapor recovery system means fuel delivery trucks attach a vapor recovery hose to your storage tank whenever they fill your storage tank with fuel. Stage II means that your pump nozzle also recovers vapors from the vehicle's tank.

### Gasoline Tank Emission Factors (EFs):

- Underground tank with both Stage I and Stage II vapor recovery = **0.003** lb of VOC per gallon of gas.
- Underground tank with only Stage I vapor recovery = **0.013** lb of VOC per gallon of gas
- Underground tank with NO Stage I or Stage II vapor recovery = **0.02** lb of VOC per gallon of gas
- Aboveground tanks = **0.04** lb of VOC per gallon of gas.

### Underground Aviation Fuel Tank Emission Factors:

The table below provides emission factors determined by the vapor recovery system used and whether a refueling truck is used to transfer fuel to aircraft.

Fuel	Vapor Recovery System	Fueling Aircraft from an On-Site Storage Tank via Tank Truck?	Emission Factor lb / gallon
Aviation Gasoline	Stage I	Yes	<b>0.019</b>
"	Stage I	No	<b>0.014</b>
"	None	Yes	<b>0.026</b>
"	None	No	<b>0.021</b>
Naphtha / JP-4	None	Yes	<b>0.008</b>
"	None	No	<b>0.0065</b>

**Reference:** U.S. EPA, “Compilation of Air Pollutant Emission Factors: Volume I: Stationary Point and Area Sources” (AP-42), fifth edition, Section 5. Emission factors are derived from Tables 5.2-5 and 5.2-7 (1/95).

### Calculation of emissions:

Multiply the total gallons by the appropriate emission factor (column 10 × column 12) to determine the “Estimated Emissions” in lbs/yr (column 16).